AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An apparatus for portioning flowable material, the apparatus comprising:

means for receiving the flowable material;

means for urging the flowable material received in the means for receiving the flowable material toward a fill member positioned underneath said means for receiving, said fill member providing a fill hole;

a mold for receiving the flowable material from the means for urging the flowable material, the mold having a first mold cavity and a second mold cavity for portioning the flowable material;

a first removal means for removing portioned flowable material from the first mold cavity;

a second removal means for removing portioned flowable material from the second mold cavity; and

means for reciprocatively positioning the mold at one of a first fill position and a second fill position along a path, wherein if the mold is in the first fill position, the fill hole is disposed at the first mold cavity and the second removal means is disposed at about the second mold cavity, and if the mold is in the second fill position, the fill hole is disposed at the second mold cavity and the first removal means is disposed at about the first mold cavity.

2. (original): The apparatus as claimed in claim 1, wherein the first removal means includes a first removal surface to push out flowable material in first mold cavity and the second removal means includes a second removal surface to push out flowable material in second mold cavity.

3. (original): The apparatus as claimed in claim 2, wherein the first removal means is a first knockout assembly including a first shaft and the first removal surface is disposed at an end of the first shaft, and the second removal means is a second knockout assembly including a second shaft and the second removal surface is disposed at an end of the second shaft.

4. (original): The apparatus as claimed in claim 1, further comprising:

a plate disposed at a first surface of the mold, having a first plurality of breathe holes and a second plurality of breathe holes;

an air chamber communicating with the first mold cavity in the first fill position through the first plurality of breathe holes and communicating with the second mold cavity in the second fill position through the second plurality of breathe holes; and

means for releasing air out of the air chamber.

5. (original): The apparatus as claimed in claim 4, wherein the plate is disposed below the mold, the apparatus further comprising means for removing particles of the flowable material collected in the air chamber.

6. (original): The apparatus as claimed in claim 5, wherein the means for removing particles comprise a channel communicating with the air chamber and an auger disposed in the channel for moving particles out of the channel.

7. (original): The apparatus as claimed in claim 1, wherein the means for urging the flowable material comprises:

a rotor housing communicating with the means for receiving the flowable material;

a rotor disposed within the rotor housing, having a rotation axis; and

a plurality of vanes disposed outwardly from the rotation axis at the rotor;

means for moving a vane of the plurality of vanes between an extended position wherein the vane projects beyond an outer surface of the rotor and a retracted position wherein the vane is retracted into the rotor, wherein the vane is in the extended position when the vane is substantially moving toward the fill hole to urge the flowable material toward the fill hole and is in the retracted position when the vane is substantially moving away from the fill hole.

8. (original): The apparatus as claimed in claim 7, wherein the means for moving a vane comprises:

a rotor end cover fixedly disposed at an inside surface of rotor housing and coaxially coupled with the rotor, having a guide about the rotation axis; and

a guide follower disposed at an end of the vane and coupled to the guide, wherein the guide follower travels along the guide as the rotor rotates to move the vane between the extended and retracted positions.

9. (original): The apparatus as claimed in claim 8, wherein the guide is a cam track and the guide follower is a cam follower.

10. (original): The apparatus as claimed in claim 1, wherein the path is substantially linear.

11. (original): The apparatus as claimed in claim 1, wherein the fill hole is a fill slot.

12. (original): The apparatus as claimed in claim 11, wherein the fill slot includes a first fill slot and second fill slot, the first fill slot communicating with the first mold cavity if the mold is in the first fill position and the second fill slot communicating with the second mold cavity if the mold is in the second fill position.

Claims 13-16 (canceled).

17. (currently amended): ~~A system~~An apparatus for processing flowable material, the system comprising:

~~flowable material;~~

means for receiving the flowable material;

means for urging the flowable material received in the flowable material receiving means toward a fill member positioned underneath said means for receiving, said fill member providing a fill hole;

a mold for receiving the flowable material from the means for urging the flowable material, the mold having a first mold cavity forming a first portioned material and a second mold cavity forming a second portioned material;

first removal means for removing the first portioned food from first mold cavity;

second removal means for removing the second portioned food from second mold cavity;

means for reciprocatively positioning the mold along a path at one of a first fill position and a second fill position, wherein the fill hole communicates with the first mold cavity and the second removal means is disposed at about the second mold cavity when the mold is in the first fill position and the fill hole communicates with the second mold cavity and the first removal means is disposed at about the first mold cavity when the mold is in the second fill position; and

means for conveying the first and the second portioned food removed from first and second mold cavities.

18. (currently amended): An apparatus for moving flowable material ~~inside~~ through a rotor housing ~~to urge~~, said rotor housing capable of urging said flowable material toward a fill member having a fill hole, said fill hole directing the flowable material into a mold in a portioning machine, the apparatus comprising:

a rotor disposed within the rotor housing, having a rotation axis;

a plurality of vanes disposed outwardly from rotation axis at the rotor; and

means for moving a vane of the plurality of vanes between an extended position wherein the vane projects beyond an outer surface of the rotor and a retracted position wherein the vane is retracted into the rotor, wherein the vane is in the extended position when the vane is

substantially moving toward the fill hole to urge the flowable material toward the fill hole and is in the retracted position when the vane is substantially moving away from the fill hole.

19. (original): The apparatus as claimed in claim 18, wherein the means for moving a vane comprises:

a rotor end cover fixedly disposed at an inside surface of rotor housing and coaxially coupled with the rotor, having a guide about the rotation axis; and

a guide follower disposed at an end of the vane and coupled to the guide, wherein the guide follower travels along the guide as the rotor rotates to move the vane between the extended and retracted positions.

20. (currently amended): An apparatus for portioning flowable material and transporting portioned flowable material, wherein the apparatus is disposed in a portioning machine which provides the flowable material to the apparatus via a first fill slot, and reciprocatively moved along a guide path in the portioning machine, the apparatus comprising:

a first plurality of ~~means~~ cavities for portioning said flowable material, said first plurality of cavities including a first ~~means~~cavity of a first predetermined size ~~for portioning~~, the first ~~means~~cavity ~~for portioning~~ having a first opening disposed at one of the first fill slot and a first means for pushing out a first portioned material therein; and

a second plurality of ~~means~~ cavities for portioning said flowable material, said second plurality of cavities including a second ~~means~~ cavity of the first predetermined size ~~for~~

~~portioning~~, the second ~~means~~ cavity ~~for portioning~~ having a second opening disposed at one of the first fill slot and a second means for pushing out a second portioned material therein,

wherein the first opening is disposed at the first fill slot if the second opening is disposed at the second means for pushing out, and the first opening is disposed at the first means for pushing out if the second opening is disposed at the first fill slot.

21. (currently amended): The apparatus as claimed in claim 20, wherein the first plurality of ~~means~~ cavities for portioning includes a third ~~means for portioning~~ cavity, said third cavity being of a second predetermined size, the third ~~means~~ cavity ~~for portioning~~ having a third opening disposed at one of ~~the~~ a second fill slot and a third means for pushing out a third portioned material therein; and

the second plurality of ~~means~~ cavities for portioning including a fourth ~~means for portioning~~ cavity, said fourth cavity being of the second predetermined size, the fourth ~~means~~ cavity ~~for portioning~~ having a fourth opening disposed at one of the second fill slot and a fourth means for pushing out a fourth portioned material therein,

wherein the third opening is disposed at the second fill slot if the fourth opening is disposed at the fourth means for pushing out, and the third opening is disposed at the third means for pushing out if the fourth opening is disposed at the second fill slot.

22. (currently amended): The apparatus as claimed in claim 21, wherein the first and second ~~means for portioning having~~ cavities have a first predetermined height and the third and fourth ~~means for portioning having~~ cavities have a second predetermined height less than the first

predetermined height, the apparatus further comprising an adapter disposed above the third and fourth ~~means for portioning~~ cavities and mounted to the portioning machine, the adapter having an adapter fill slot disposed between the second fill slot and the third ~~means for portioning~~ cavity if the fourth opening is disposed at the fourth means for pushing out and disposed between the second fill slot and the fourth ~~means for portioning~~ cavity if the third opening is disposed at the third means for pushing out.

23. (original): The apparatus as claimed in claim 22, wherein a combination of an adapter height and the second predetermined height approximately equals the first predetermined height.